

## **AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows.

- 1. (Withdrawn) A directory server system, comprising:
  - a front-end portion adapted to connect to a client computer;
  - a back-end portion with an embedded database; and
  - a mapping tree portion;
  - wherein the front-end portion comprises a core protocol connection responder configured to access information stored in the back-end portion, wherein the back-end portion is maintained in a logical representation by a directory information tree;
  - wherein the mapping tree portion identifies a location of information stored in the back-end portion in response to a request sent by the client computer,
  - wherein the back-end portion comprises a plurality of back-end plug-ins for database management.
- 2. (Withdrawn) The system of claim 1, further comprising:
  - a graphical user interface backed by an administrative server configured to manage the directory server system.
- 3. (Withdrawn) The system of claim 1, further comprising:
  - a gateway allowing access and querying of the back-end portion from a web browser.
- 4. (Withdrawn) The system of claim 1, further comprising:
  - a plurality of database command line tools to manipulate the front-end portion and the backend portion.
- 5. (Withdrawn) The system of claim 1, further comprising: a network management protocol monitor.
- 6. (Withdrawn) The system of claim 1, wherein the front-end portion manages communication between server-side software and a directory client program stored on the client computer.

7. (Withdrawn) The system of claim 1, wherein the front-end portion functions as a daemon.

- 8. (Withdrawn) The system of claim 1, wherein the front-end portion functions as a service.
- 9. (Canceled)
- 10. (Withdrawn) The system of claim 1, wherein the client computer is adapted to connect to the front-end portion using an encrypted connection.
- 11. (Withdrawn) The system of claim 9, wherein the plurality of back-end plug-ins allow a directory administrator to manage and manipulate the information stored in the embedded database.
- 12. (Withdrawn) A directory server system, comprising:
  - a front-end portion adapted to connect to a client computer;
  - a back-end portion with an embedded database;
  - a mapping tree portion;
  - a graphical user interface backed by an administrative server configured to manage the directory server system;
  - a gateway allowing access and querying of the back-end portion from a web browser;
  - a plurality of database command line tools to manipulate the front-end portion and the backend portion; and
  - a network management protocol monitor;
  - wherein the front-end portion comprises a core protocol connection responder configured to access information stored in the back-end portion, wherein the back-end portion is maintained in a logical representation by a directory information tree;
  - wherein the mapping tree portion identifies a location of information stored in the back-end portion in response to a request sent by the client computer,
  - wherein the back-end portion comprises a plurality of back-end plug-ins for database management.

13. (Previously Presented) A computer system to manage a directory server, comprising:

a processor;

a memory; and

software instructions stored in the memory for enabling the computer system under control of the processor, to perform:

receiving a Lightweight Directory Access Protocol request from a client computer to a front-end portion;

processing the Lightweight Directory Access Protocol request to create a front-end call;

sending the front-end call to a back-end portion;

processing the front-end call using a default database function to produce a result, wherein the default database function comprises a mapping tree portion to identify a location of information stored in the back-end portion in response to the Lightweight Directory Access Protocol request sent by the client computer,

wherein the back-end portion comprises a plurality of back-end plug-ins for database management;

passing the result to the front-end portion; and

sending the result from the front-end portion to the client computer.

14. (Previously Presented) A method of processing a Lightweight Directory Access Protocol request from a client computer using a directory server comprising:

sending a Lightweight Directory Access Protocol request from the client computer to a front-end portion;

processing the Lightweight Directory Access Protocol request to create a front-end call; sending the front-end call to a back-end portion;

processing the front-end call using a default database function to produce a result,

wherein, the default database function comprises a mapping tree portion to identify a location of information stored in the back-end portion in response to the Lightweight Directory Access Protocol request sent by the client computer,

wherein the back-end portion comprises a plurality of back-end plug-ins for database management;

passing the result to the front-end portion; and sending the result from the front-end portion to the client computer.

- 15. (Original) The method of claim 14, further comprising:
  - managing communication by the front-end portion between server-side software and a directory client program stored on the client computer.
- 16. (Original) The method of claim 14, further comprising:

  managing the directory server system using a graphical user interface backed by an administrative server.
- 17. (Original) The method of claim 14, further comprising: accessing and querying the back-end portion from a web browser with a gateway.
- 18. (Original) The method of claim 14, further comprising:
  manipulating the front-end portion and the back-end portion with a plurality of database
  command line tools.
- 19. (Original) The method of claim 14, further comprising:
  reporting activity to a network console workstation by a network management protocol
  monitor.
- 20. (Previously Presented) A method of processing a Lightweight Directory Access Protocol request from a client computer using a directory server comprising:
  - sending a Lightweight Directory Access Protocol request from the client computer to a front-end portion;

processing the Lightweight Directory Access Protocol request to create a front-end call; sending the front-end call to a back-end portion;

processing the front-end call using a default database function to produce a result,

wherein, the default database function comprises a mapping tree portion to identify a location of information stored in the back-end portion in response to the Lightweight Directory Access Protocol request sent by the client computer;

passing the result to the front-end portion;

sending the result from the front-end portion to the client computer;

managing communication by the front-end portion between server-side software and a directory client program stored on the client computer;

managing the directory server using a graphical user interface backed by an administrative server;

accessing and querying the back-end portion from a web browser with a gateway;

manipulating the front-end portion and the back-end portion with a plurality of database command line tools,

wherein the back-end portion comprises a plurality of back-end plug-ins for database management; and

reporting activity to a network console workstation by a network management protocol monitor.

21. (Previously Presented) An apparatus for processing a Lightweight Directory Access Protocol request from a client computer using a directory server comprising:

means for sending a Lightweight Directory Access Protocol request from the client computer to a front-end portion;

means for processing the Lightweight Directory Access Protocol request to create a frontend call;

means for sending the front-end call to a back-end portion;

means for processing the front-end call using a default database function to produce a result,

wherein, the default database function comprises a mapping tree portion to identify a location of information stored in the back-end portion in response to the Lightweight Directory Access Protocol request sent by the client computer,

wherein the back-end portion comprises a plurality of back-end plug-ins for database management;

means for passing the result to the front-end portion; and means for sending the result from the front-end portion to the client computer.

- 22. (Withdrawn) The system of claim 1, wherein the core component connection responder is configured to perform at least one selected from the group consisting of roles and class of service.
- 23. (New) The computer system of claim 13, wherein the core component connection responder is configured to perform at least one selected from the group consisting of roles and class of service.